

**Remarks**

**I. Introduction**

This paper is submitted in response to the Office Action mailed September 23, 2004. A complete listing of all pending claims is submitted herewith. Claims 27-42 are pending in the above-identified application. All the pending claims have been rejected.

**II. The Rejections Under 35 U.S.C. 112 Should Be Withdrawn**

Claims 31, 32 and 37-40 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Examiner states that claims 31 and 40 are indefinite because there is no direct antecedent basis for the recitation of “the adsorber.” However, independent claim 27 recites, in part, “A method for removing volatile compounds from air, which method comprises passing the air over an adsorber...” Therefore, it is respectfully submitted that there is direct antecedent basis for “the adsorber” as recited in claims 31 and 40.

The Examiner states that claim 31 is indefinite because it recites “a plurality of monoliths” without any correlation to “a monolithic porous carbon” recited in claim 27. Claim 31 has been amended to clarify that the plurality of monoliths are “a plurality of monolithic porous carbon” to overcome the rejection.

The Examiner states that claims 37, 38 and 40 are indefinite because there is no direct antecedent basis for “the absorbed compounds.” Independent claim 27 recites, in part, “A method for removing volatile compounds from air, which method

comprises passing the air over an adsorber comprising a monolithic porous carbon to adsorb the volatile compounds, and then passing an electric current through the adsorber to heat the adsorber and drive off at least some of the adsorbed compounds” Therefore, it is respectfully submitted that there is direct antecedent basis for “the adsorbed compounds” as recited in dependent claims 37, 38 and 39.

In view of the foregoing, reconsideration and withdrawal of the rejection of claims 31, 32 and 37-40 under 35 U.S.C. 112, second paragraph, is respectfully requested.

### **III. The Rejections Under 35 U.S.C. 103 Should Be Withdrawn**

Claims 27-29 and 40-42 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,750,026 to Gadkaree et al. (“Gadkaree et al.”) in view of EPO reference number 0,254,551 (“EPO ‘551”). The Examiner agrees with the Applicants that the presently claimed method of making porous monolithic carbon is not shown by Gadkaree et al. It is alleged, however, that the specific method of making the porous monolithic carbon is disclosed in EPO ‘551, which is referred to within Applicant’s specification as being the preferred method of making porous monolithic carbon. Thus, it is the Examiner’s position that it would have been obvious to form a carbon monolith according to EPO ‘551 and use it according to the process and apparatus of Gadkaree et al.

When combining references for purposes of demonstrating obviousness of the claimed invention, the first requirement is that a suggestion, teaching, or motivation to combine the prior art references be shown. *C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). “Multiple cited prior art references *must suggest the*

*desirability* of being combined and the reference must be viewed without the benefit of *hindsight* afforded to the disclosure. *In re Paulsen*, 30 F.3d 1475, 1482 (Fed. Cir. 1994); *emphasis added*. The Examiner has explicitly used the specification of the present invention to combine EPO '551 with Gadkaree et al. However, “[i]t is improper to use the inventor’s disclosure as a road map for selecting and combining prior art disclosures.” *See Grain Processing Corp. v. American Maize-Products Corp.*, 840 F.2d 902, 907 (Fed. Cir. 1988). Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, and not be based on Appellant’s disclosure. *See In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991). The presently claimed invention discloses a specific process and method in which a carbon monolith with specific properties is chosen to effectively remove volatile compounds from air. The presently claimed invention has a clear technical advantage over previously disclosed methods as shown in the disclosed examples. For example, by using the methods of the present invention hot spots that may be formed using the electrical conductors of the prior art are avoided without the use of special coatings or binders.

Furthermore, even assuming, *arguendo*, that the cited references could be combined to obtain the presently claimed invention, the mere fact that references might be modified is not enough to constitute obviousness unless the prior art also suggests the desirability of the modification. Moreover, it is improper to combine references where the references teach away from their combination. *See In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983). Gadkaree et al. teaches that a device made entirely of activated carbon having a multicellular structure in which the use of liquid or solid resin alone presents problems. (*See* Gadkaree et al. col. 10 lines 66-67). Gadkaree et al. further states that the

filler added to the resin must be hydrophilic. (See Gadkaree et al. col. 10 lines 52-54). In contrast, the presently claimed invention discloses a method for removing volatile compounds from air wherein the monolithic porous carbon is made by partially curing a phenolic resin to a solid, comminuting the partially cured resin, sintering the comminuted resin to produce a form-stable sintered product and carbonising the form-stable sintered product. Therefore, not only is there no suggestion or motivation to modify or combine the teachings in the references but the disclosure of Gadkaree et al. would unquestionably lead a person of ordinary skill away from the methods of the present invention. Accordingly, it is respectfully submitted that the Examiner has not set forth a *prima facie* case of obviousness. Therefore, reconsideration and withdrawal of the rejection of claims 27-29 and 40-42 under 35 U.S.C. § 103(a) as being unpatentable over Gadkaree et al. in view of EPO '551 is respectfully requested.

Claim 30 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Gadkaree et al. in view of EPO '551 further in view of U.S. Patent No. 5,914,294 to Park et al. ("Park et al."). Applicants respectfully traverse the rejection. As stated above, Gadkaree et al. combined with EPO '551 fails to set forth a *prima facie* case of obviousness with respect to independent claim 27. The addition of Park et al. also does not set forth a *prima facie* case of obviousness with respect to independent claim 27. As claim 30 depends from claim 27, which is believed allowable for at least the reasons discussed above, dependent claim 30 is also allowable. Therefore, in view of the foregoing, reconsideration and withdrawal of the rejection of claim 30 under 35 U.S.C. 103(a) is respectfully requested.

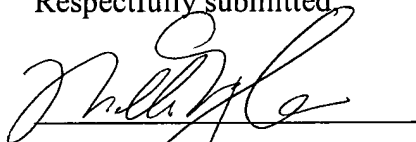
Claims 31-36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Gadkaree et al. in view of EPO '551 further in view of U.S. Patent No. 5,110,328 to Yokota et al. ("Yokota et al."). Applicants respectfully traverse the rejections. As stated above, Gadkaree et al. combined with EPO '551 fails to set forth a *prima facie* case of obviousness with respect to independent claim 27. The addition of Yokota et al. also does not set forth a *prima facie* case of obviousness with respect to independent claim 27. As claims 31-36 depend from claim 27, which is believed allowable for at least the reasons discussed above, these dependent claims are also allowable. Therefore, in view of the foregoing, reconsideration and withdrawal of the rejection of claims 31-36 under 35 U.S.C. 103(a) is respectfully requested.

Claims 37-39 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Gadkaree et al. in view of EPO '551 further in view of Yokota et al. and U.S. Patent No. 5,628,819 to Mastemaker et al. ("Mastemaker et al."). Applicants respectfully traverse the rejections. As stated above, Gadkaree et al. combined with EPO '551 fails to set forth a *prima facie* case of obviousness with respect to independent claim 27. The addition of Yokota et al. and Mastemaker et al. also does not set forth a *prima facie* case of obviousness with respect to independent claim 27. As claims 37-39 depend from claim 27, which is believed allowable for at least the reasons discussed above, these dependent claims are also allowable. Therefore, in view of the foregoing, reconsideration and withdrawal of the rejection of claims 37-39 under 35 U.S.C. 103(a) is respectfully requested.

V. **Conclusion**

In view of the above amendments and remarks, reconsideration and allowance of all pending claims is respectfully requested. However, in the event that the Examiner maintains the rejections Applicants submit herewith a Notice of Appeal From the Examiner to the Board of Patent Appeals and Interferences.

Respectfully submitted,



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